

Environmental Health Assessment and Improvement Plan - 2007

Hudson County, New Jersey

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Hudson Regional Health Commission

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Contents

Overview

The Community

Environmental Issues

- **Clean Air**
- **Hazardous Materials/Emergency Response**
- **Excessive Noise**
- **Clean Water**
- **Solid Waste Management**
- **Underground Storage Tanks**
- **Pesticides**

Open and Effective Government

Resources and Partnerships

Overview

The Hudson Regional Health Commission (“the Commission”) is a regional health commission established pursuant to NJSA 26:3 – 85 et seq., and is the certified local agency for the provision of environmental health services within Hudson County, NJ under the auspices of the County Environmental Health Act (CEHA). As such, the Commission is delegated to conduct specific regulatory and/or response activities in the areas of: Air Pollution Control, Hazardous Materials, Noise, Solid Waste, Underground Storage Tanks, Pesticides and Water Pollution.

These activities are conducted by eleven professional field staff with the majority having greater than 10 years experience in the field. In addition to extensive formal training, personnel have strong academic background in the sciences including baccalaureate and/or masters degrees in areas such as biology, chemical engineering, environmental engineering, environmental management, geology and mechanical engineering.

This plan is intended to identify the most salient environmental issues within Hudson County and to propose a plan to address these issues in accordance with our authority and delegated responsibilities for CY 2007.

The Community

Hudson County is a densely populated urban community, comprised of 12 municipalities, located in the New York metropolitan area. The County has a population of approximately 608,975 residing in its forty-six square mile area. Unlike other urban counties in the state, Hudson’s population continues to remain stable due to construction of new housing as well as continued immigration. The County contains 7.2% of the state’s population but only 0.6% of its land mass. With a population density in excess of 13,000 persons per square mile the County is the most densely populated in New Jersey and is one of the more densely populated counties in the nation. Population densities in some municipalities within the County exceed 40,000 persons per square mile. The citizenry is both ethnically and racially diverse (White non-Hispanic 35.3%, Hispanic American 39.8%, African American 13.5%, Asian American 9.4%). Median household income in the County is \$40,293 with 15.5% of persons below poverty level.

The housing stock of the County is primarily older multifamily residential buildings. 84% of the County’s housing units are located in multifamily buildings with the majority of these in structures with three or greater units. Approximately ninety percent of all housing units were constructed prior to 1978 with 1941 being the median year of construction. The County is currently experiencing a boom in new residential and commercial construction, particularly along its easternmost border. Historically, Hudson County has been a center of industrial activity. Given its prime location with regard to transportation routes, waterways, and its proximity to New York City, Hudson County remains a center of industrial, commercial, and maritime activities.

Other than at its border with Bergen County to the north, Hudson County is surrounded by water. The eastern border of the county is the Hudson River. The Hackensack River and the Passaic River make up the county’s western border with the Kill Van Kull being its southernmost border.

Environmental Issues

Clean Air

Air pollution in Hudson County, not unlike other metropolitan areas is at times the County's most visible environmental issue. It originates from a mix of mobile, area and point sources with a significant contribution from sources outside the County. The National Ambient Air Quality Standards (NAAQS) are used as a measure a measure of overall regional air quality. Standards have been established for six pollutants, called criteria pollutants. There have been no exceedances of the NAAQS for carbon monoxide, lead, nitrogen oxides and sulfur dioxide in greater than a decade. However, the control of both ozone and fine particulate matter levels remains troublesome throughout the state as well as in Hudson County. In 2006 to date, ozone concentrations exceeded the NAAQS standard for an 8-hour average on six days in Hudson and fourteen days statewide. Though particulate concentrations show a trend of decreased concentration, annual average fine particulate matter concentrations exceed the NAAQS in seven of the eight previous years, including 2006 to date. The Commission will continue to conduct regulatory compliance inspections to ensure that sources that emit particulate or have emissions that contribute to atmospheric ozone formation operate in compliance with State and Federal regulations.

In addition to area wide air quality, odorous or other emissions from specific facilities may impact adjoining areas on occasion. In a community with high population density and small geographic footprint commercial and industrial operations may be in proximity to residential areas leading to citizen complaints of air pollution. To date in 2006, the Commission responded to 242 such complaints. The Commission continues to place response to and resolution of citizen complaints as a high priority. Many times these complaints can be resolved in a manner which is satisfactory to the complainants with minimal adverse impact on the entity responsible for the emissions.

In 2007, the Commission will continue to conduct compliance inspections mandated by NJDEP. As possible, the Commission will focus compliance activities on those air pollutions sources that contribute to ambient ozone and particulate matter concentrations. Additionally, both the USEPA and NJDEP have recognized that tetrachloroethylene emitted by dry cleaners is a concern in the outdoor air and more significantly in the indoor air of buildings in which they are housed. A new regulatory strategy has been established to address this concern and the Commission will seek to allocate additional resources towards fostering compliance with these regulations to reduce these emissions.

Hazardous Materials / Emergency Response

Hudson County, with its century old industrial base, has been the site of significant industrial contamination prior to the advent of modern pollution control practices and regulation. Fortunately, in recent decades, the most egregious examples of this contamination have been addressed. Likewise many of the sites of less severe chemical contamination have also been addressed. However, this industrial legacy of chemical contamination remains present at many sites and must be addressed. Despite current pollution control practices and regulation, discharges of hazardous substances due to accidents or mechanical failures still occur, and yet still, there are individuals who choose to ignore or remain ignorant of accepted hazardous

Hazardous Materials/Emergency Response continued:

substance handling and disposal practices. Thus, the control and prevention of current discharges and the remediation of historic discharges of hazardous substances remain a prominent environmental issue within the County.

The Commission had historically served as the primary hazardous materials response entity within the County. With the evolution of three fire department based HazMat teams, the Commission continues to serve as a key technical support liaison for incidents in which those entities are involved and provides key support for various monitoring and risk assessment functions. Through cooperative projects with the Hudson County Office of Emergency Management and NJ Office of Homeland Security and Protection the Commission and fire department HazMat Teams have obtained substantial equipment suitable for the identification and characterization of biological, chemical and radiological materials that might be discharged accidentally from industrial mishaps or intentionally in a domestic terrorist attack.

In 2007, the Commission will continue to maintain a well trained hazardous materials response staff. This staff will continue to work cooperatively with emergency management and fire department personnel as well as all other responders. Since 2003, the existing fire department based Hazmat teams; Bayonne, Hoboken, and Jersey City have maintained interlocal agreements with the Commission and conduct their operations under the auspices of the County Environmental Health Act. The fire department hazmat teams and the Commission continue to conduct joint preparedness planning and training.

The Commission maintains an intimate working knowledge of the majority of facilities utilizing and transporting hazardous substances in Hudson County. Some of these materials can be classified as “extremely hazardous” and if released in substantial quantity could pose a grave threat to the citizens of Hudson and adjoining counties. Such facilities, in the current circumstance, could reasonably be viewed as potential targets of terrorist activities. The Commission works cooperatively with LEPCs and Public Safety personnel on the identification of these facilities; evaluation of the magnitude of the threat posed to the population; and the identification of measures that may be implemented to mitigate these threats.

Excessive Noise

As is the case with air pollution, the close interface of residential, commercial, and industrial operations may lead to an increase in citizen complaints related to excessive noise. Excessive noise is, perhaps, one of the most vexing environmental stressors an individual may experience. The prevention of excessive noise and its resolution where it exists will likely always remain an ongoing environmental issue in the urban environment that needs to be addressed with vigilance. The Commission will continue to work closely with local government officials and building owners to address noise issues both proactively and in response to citizen complaints.

Clean Water

The Commission will continue to conduct those delegated regulatory compliance activities that are intended to limit the discharge of pollutants to area water bodies. Additionally, in recent years there has been resurgence in the recreational uses of the rivers and harbors within the

Clean Water continued:

County. Much of the recreation is non-contact such as the use of larger power and sailboats. However, one can now find kayak and canoe rental facilities along the area waterways, and jet skiers “buzzing” the Statue of Liberty are not rare.

A water-quality monitoring program, to gather baseline data in these areas was conducted in 2001 and 2002 through supplementary funds provided by NJDEP but was discontinued due to a lack of continued funding. The project provided useful information regarding water quality in the area and determined that the bacteriological quality of the area waterways is generally good with the exception of periods for 1 to 2 days after rainstorms.

In 2006, measures to reinstitute the program commenced through the support of the County of Hudson. The equipment necessary to conduct the program has been acquired by the Hudson County Bacteriological Laboratory, staff members gained proficiency with test methods and the laboratory received NJDEP certification for the appropriate test methods. In CY 2007, the Commission intends to conduct weekly monitoring of bacterial indicators in area waterways. This monitoring program may ultimately inform policies and or public information regarding the recreational use of these water bodies.

Solid Waste Management

The Commission conducts a solid waste management program to ensure solid wastes are disposed in an environmentally sound manner. The Hudson County Improvement Authority acts as an authorized CEHA agent of the Commission for this program and conducts extensive field activities in addition to those conducted by the Commission. Compliance inspections are conducted of both facilities and haulers that transport, process and dispose of solid waste as well as in recycling facilities. Recently, railroads developed solid waste transfer operations without many of the environmental controls that would be required if these activities were conducted and a properly authorized solid waste facility. NJDEP was asked to become involved with the matter which is currently being evaluated by the Office of the Attorney General. HRHC and HCIA will continue emphasize proper management of solid waste as the primary program objective for 2007.

Underground Storage Tanks

The Commission participates in two pilot projects addressing underground storage tanks. The first is a voluntary compliance assistance project designed to aid homeowners who have leaking underground tanks. In most cases the Commission is able to oversee the closure and remediation process and the homeowner benefits by not having to pay oversight costs to NJDEP. This program will be continued in 2007.

The second program involves detailed compliance inspections at facilities such as gasoline service stations which have regulated underground storage tanks. Hudson was one of 6 counties chosen in 2005 by NJDEP to conduct this program. On a average 75 facilities are inspected each year. Regulatory violations are common, though most can be corrected easily and cooperatively. In those cases, with significant non-compliance, enforcement actions are coordinated with NJDEP, and result in significant penalty assessments. The Commission will continue participation in this program in 2007.

Pesticides

The improper use of pesticides particularly in densely populated areas has the potential for adverse impacts upon those exposed. With this in mind, the Commission intends to continue participation in the optional pesticide control project. The program is focuses on ensuring that pesticides are applied by licensed applicators in accordance with regulations and safety procedures. Compliance inspections typically are focused on schools, restaurants, and multi-family buildings to ensure that persons who use or reside in those facilities are not exposed to pesticides due to improper application.

In 2006, the Commission participated in a project investigating the sale of unregistered, improperly labeled and illegal pesticides. Pesticides fitting these descriptions were found to be offered for sale in several retail outlets in Hudson County. These materials are generally imported and are not labeled or not approved for safe and efficacious use.

The Commission intends to participate in both programs in 2007.

Open and Effective Government

The Commission views its collaborative efforts with both its governmental partners as well as the general public as a prime a responsibility. The Commission will continue to expand and enhance its relationships with local and county officials, emergency planning groups and LEPCs. No less important is the continued provision of assistance and information to individuals, citizen groups, environmental commissions and the regulated community as requested.

Resources and Partnerships

Commission staff primarily assigned to public health emergency preparedness activities, mosquito control and the laboratory will continue to support environmental control programs as necessary. The Hudson County Improvement Authority (HCIA) and the commission have an interlocal agreement that delegates the HCIA authority to conduct certain solid waste enforcement activities. Likewise, interlocal agreements are in place with three fire department based hazardous materials programs.

These resources have been adequate to conduct mandated program activities. While certain program areas certainly warrant expanded activities, in general, a significant expansion cannot be conducted without the funding to provide for staff and equipment to conduct the activity. Overall, funding for personnel to conduct environmental health programs has remained static for close to a decade. Given steadily increasing costs, stable funding has resulted in a net decrease in essential personnel over time.